

What is Claimed is:

1 1. A multiple force tool for applying pressure to
2 circuit board components comprising:

3 first, second and third support channels for
4 supporting first, second and third horizontally extending
5 arms over a circuit board having multiple components;

6 a plurality of pressure cylinders supported by
7 said horizontally extending arms over each of said
8 components; and

9 means connected to said pressure cylinders for
10 extending a pressure foot of said cylinders to a position for
11 applying a force against said components.

1 2. The multiple force tool according to claim 1
2 wherein said horizontally extending arms are positionable
3 along said channels to vary the location of said pressure
4 cylinders along a first axis.

1 3. The multiple force tool according to claim 1
2 wherein said horizontally extending arms include means for
3 positioning said pressure ^{cylinders} ~~transducers~~ along a second axis.

1 4. The multiple force tool according to claim 2
2 wherein said channels include position indicia for
3 establishing a position coordinate for said pressure
4 cylinders along said first axis.

1 5. A multiple force tool for establishing a pressure
2 on circuit board components during manufacture of a circuit
3 board bearing said components comprising:

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first, second, and third channels for supporting a plurality of horizontal arms, said channels being located about the periphery of a surface which supports said circuit board;

a plurality of horizontal arms supported in said channels which extend over said circuit board;

a plurality of compressed air/pressure cylinders supported on said horizontal arms, having a pressure foot which is extendable in response to compressed air to apply a force on a component of said circuit board located beneath said pressure foot; and

a source of compressed air connected to said compressed air pressure cylinders, operable in response to a foot valve for extending said pressure feet against said circuit components.

6. The multiple force / tool according to claim 5 wherein said source of compressed air supplies a pulse of air pressure having a preset duration and magnitude.

7. The multiple force tool according to claim 5 wherein said compressed air is supplied through a flow control valve to said compressed air pressure cylinders for regulating the speed of extension of said pressure foot.

8. The multiple force tool according to claim 5 wherein said source/ of compressed air comprises:

a timer means which operates in response to a closure of said foot valve to produce a timed pulse of compressed air to said compressed air cylinders whereby said pressure feet are extended for a period of time controlled by

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le force tool
pressure regul
ring said pulse
fold which su
compressed air
le force tool
flow control
air cylinders

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